5-31-2019

Organic Chemistry I Drill (CHEM2210D) - Module 8 - Sample B. Answer Key

Candace M. Lawrence
Xavier University of Louisiana, clawren2@xula.edu

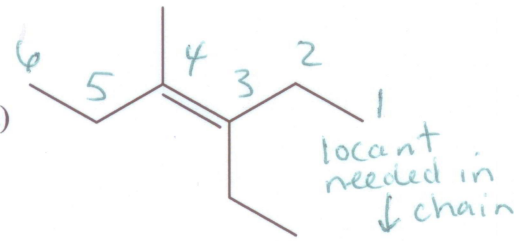
Name KEY

Organic Chemistry 2210D

Eighth Drill Test (Sample B)
Answer All Questions

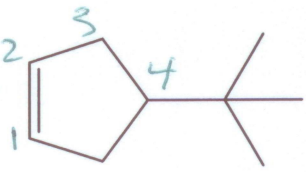
1. Give the IUPAC name of each of the following compounds.

a)



3-ethyl-4-methyl-3-hexene

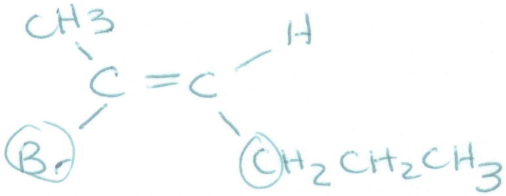
b)



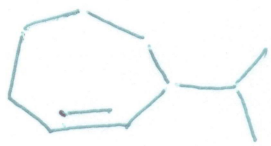
4-tert-butyl cyclopentene

2. Draw the structure of each of the following compounds.

a) (*Z*)-2-bromo-2-hexene

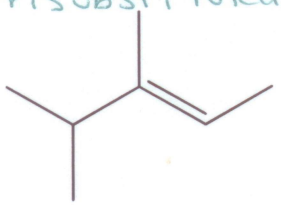


b) 3-isopropylcycloheptene

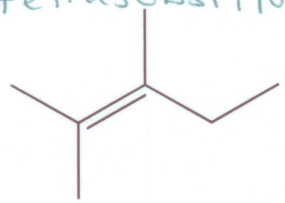


3. Which of the following compounds is the most stable? Which is the least stable?

trisubstituted

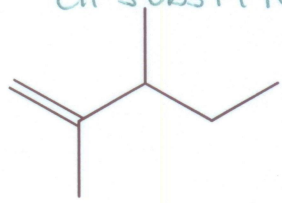


tetrasubstituted



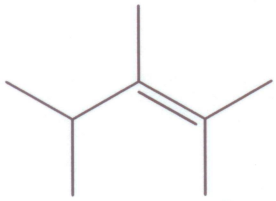
most stable

disubstituted

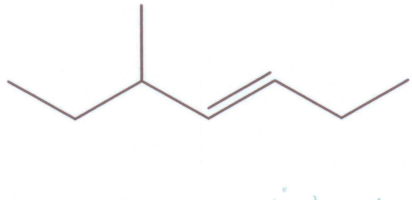


least stable

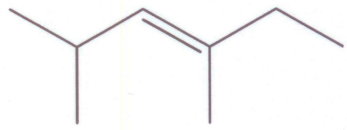
4. Which of the following compounds has the greatest enthalpy (heat) of combustion? = least stable
Which has the smallest?



tetrasubstituted
most stable
smallest ΔH

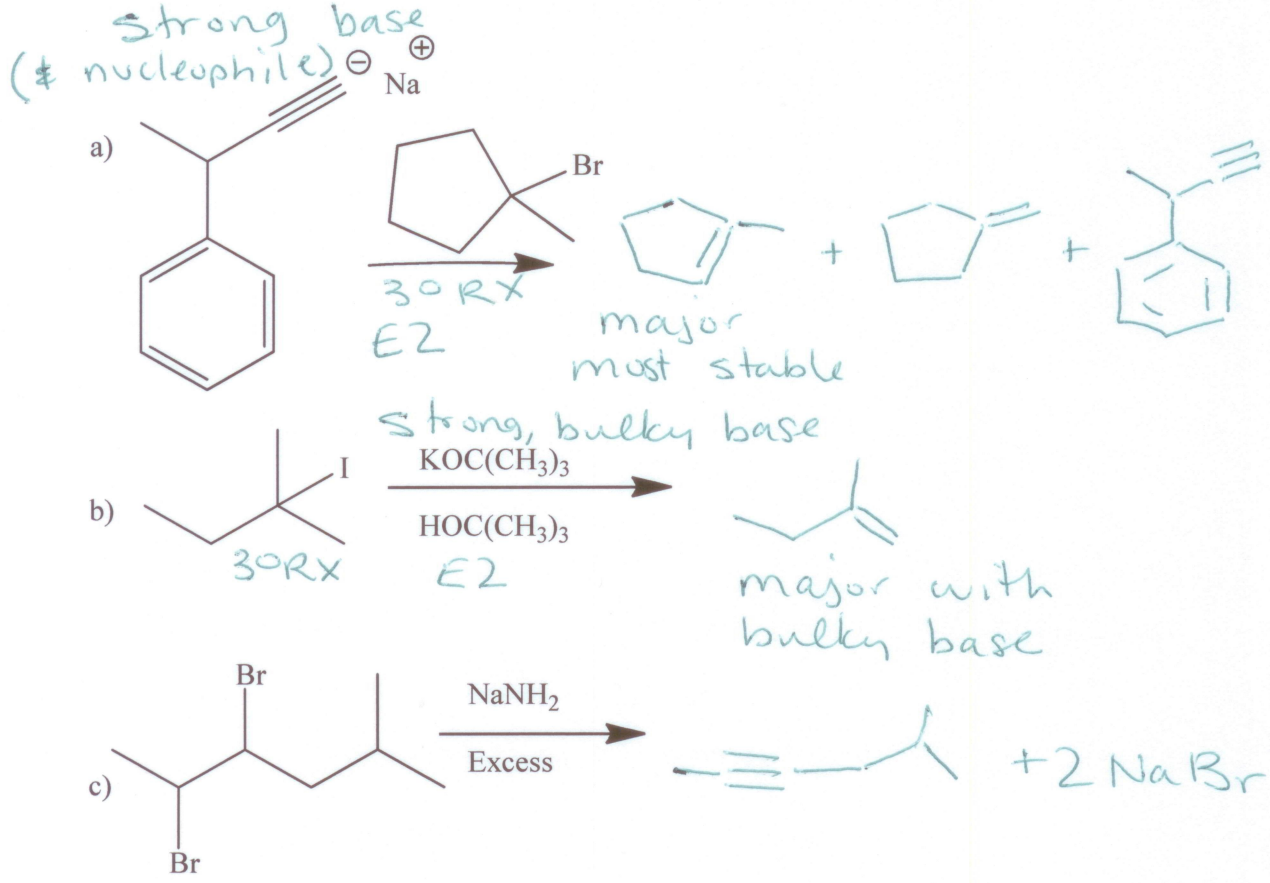


disubstituted
least stable
largest ΔH

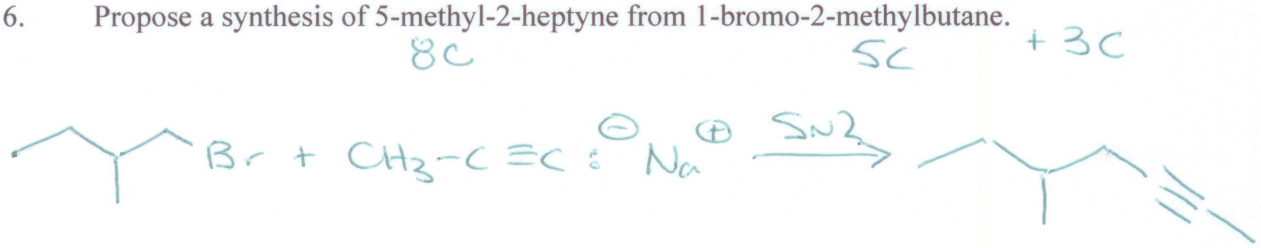


trisubstituted

5. Predict the products of each of the following reactions. Where there are major and minor products for a reaction, indicate which product is the major one.



6. Propose a synthesis of 5-methyl-2-heptyne from 1-bromo-2-methylbutane.



7. Propose a complete mechanism for the following reaction.